

CLAIMS

1. A method of correcting defects in a label resulting from a non-uniform application of adhesive to a surface of the label prior to applying the label to a container, said method
5 including the following steps:
 - a. applying an adhesive to a surface of a label in a non-uniform manner to cause regions of said surface to be substantially devoid of said adhesive, and after applying said adhesive;
 - b. applying a fluid in said regions to substantially fill said regions.
- 10 2. The method of claim 1, wherein the step of applying the fluid is carried out by applying the fluid to said container in selected locations that align with the regions of said surface of said label that are substantially devoid of said adhesive when the label is applied to said container.
3. The method of claim 1, wherein the step of applying the fluid is carried out by
15 applying the fluid to said label in the regions of said surface that are substantially devoid of said adhesive prior to applying said label to said container.
4. The method of claim 1, including the step of selecting said fluid to have a clarity compatible with the clarity of said adhesive.
5. The method of claim 1, including the step of selecting an adhesive as said fluid.
- 20 6. The method of claim 1, including the step of selecting a non-adhesive as said fluid.
7. The method of claim 6, including the step of selecting said fluid from the group consisting of mineral oil, glycerin, fatty acid alcohol, other glycols and vegetable oil.
8. The method of claim 7, wherein said other glycols include epoxy end-capped polypropylene glycol and alcohol flow aids.
- 25 9. The method of claim 7, wherein said alcohol flow aids include propoxylated neopentyl glycol.
10. The method of claim 2, including the step of selecting said fluid to have a clarity compatible with the clarity of said adhesive.
11. The method of claim 2, including the step of selecting an adhesive as said fluid.
- 30 12. The method of claim 2, including the step of selecting a non-adhesive as said fluid.
13. The method of claim 12, including the step of selecting said fluid from the group consisting of mineral oil, glycerin, fatty acid alcohol and vegetable oil.

14. The method of claim 3, including the step of selecting said fluid to have a clarity compatible with the clarity of said adhesive.
15. The method of claim 3, including the step of selecting an adhesive as said fluid.
16. The method of claim 3, including the step of selecting a non-adhesive as said fluid.
- 5 17. The method of claim 16, including the step of selecting said fluid from the group consisting of mineral oil, glycerin, fatty acid alcohol and vegetable oil.
18. The method of claim 1, including the step of selecting a radiation curable adhesive as said adhesive.
19. The method of claim 2, including the step of selecting a radiation curable adhesive as
10 said adhesive.
20. The method of claim 3, including the step of selecting a radiation curable adhesive as said adhesive.
21. The method of claim 1, including the step of selecting a cold glue adhesive as said adhesive.
- 15 22. The method of claim 2, including the step of selecting a cold glue adhesive as said adhesive.
23. The method of claim 3, including the step of selecting a cold glue adhesive as said adhesive.
24. An apparatus for continuously applying plastic labels to containers, said apparatus
20 including:
- A rotatable applicator roll for receiving an adhesive on the outer surface thereof;
- A rotating transfer member including a plurality of transfer pads carried thereon, said transfer member being located to rotate the transfer pads in close proximity to
25 the outer surface of the applicator roll, whereby adhesive from the roll is transferred to an outer surface of each of said pads;
- A dispensing magazine for retaining a plurality of individual labels in a stack, with the lowermost label in the stack being located in a downstream path of travel of the transfer pads after each of said transfer pads has engaged the outer surface of the applicator
30 roll to receive adhesive thereon, each of said pads, with the adhesive thereon, being rotated into close proximity with the lower surface of the lowermost label in the magazine for selectively applying the adhesive to the lower surface of said lowermost label in the stack in

a manner that leaves at least one region on said lower surface substantially free of adhesive and for removing said lowermost label from the stack through surface adhesion to releasably secure said lowermost label to each of said transfer pads;

5 A second rotating transfer member for receiving said labels from the transfer pads prior to said labels being applied to a container; and

Means for applying a fluid in said at least one region to substantially fill said at least one region.

25. The apparatus of claim 24, wherein said means for applying fluid in said at least one region applies said fluid to said container in a selected location that aligns with the at least
10 one region of said surface of said label that is substantially free of said adhesive prior to said label being applied to said container.

26. The apparatus of claim 24, wherein the step of applying the fluid is carried out by applying the fluid to said label in said at least one region of said surface that is substantially free of said adhesive prior to said label being applied to said container.

15 27. The apparatus of claim 24, wherein said adhesive is a radiation curable adhesive, said apparatus further including a radiation cure station including said second rotating transfer member, said second rotating transfer member directing the labels through a radiation cure section of said radiation cure station to thereby partially cure the adhesive to increase the tackiness of said adhesive prior to the label being applied to a container.

20 28. The apparatus of claim 24, further including a container handling device for receiving containers at an inlet; rotating said containers through a label application section, and directing the containers with the labels applied thereon to an outlet.

25 29. The apparatus of claim 25, further including a container handling device for receiving containers at an inlet; rotating said containers through a label application section, and directing the containers with the labels applied thereon to an outlet.

30. The apparatus of claim 26, further including a container handling device for receiving containers at an inlet; rotating said containers through a label application section, and directing the containers with the labels applied thereon to an outlet.

30 31. The apparatus of claim 27, further including a container handling device for receiving containers at an inlet; rotating said containers through a label application section, and directing the containers with the labels applied thereon to an outlet, said radiation cure station being positioned adjacent to the container handling device such that the individual

labels with the partially cured adhesive thereon are directed sequentially into engagement with the periphery of discrete containers as the discrete containers are directed through the label application section.

32. The apparatus of claim 24, wherein each of the transfer pads includes a recess
5 extending inwardly from a side edge, each said transfer pads removing a lowermost label from the stack with a region of the label overlying said recess being free of adhesive.

33. The apparatus of claim 25, wherein each of the transfer pads includes a recess extending inwardly from a side edge, each said transfer pads removing a lowermost label from the stack with a region of the label overlying said recess being free of adhesive.

10 34. The apparatus of claim 26, wherein each of the transfer pads includes a recess extending inwardly from a side edge, each said transfer pads removing a lowermost label from the stack with a region of the label overlying said recess being free of adhesive.